

**REMARKS**

In response to the Office Action mailed December 12, 2003, Applicant respectfully requests reconsideration. Claims 1-13 were previously pending in this application. Claims 1, 2, 4, 5, 8, 9, 12, and 13 have been amended and claims 14-23 are newly added. The Office Action rejected claims 1-13 under 35 U.S.C. §112, second paragraph as being incomplete for omitting essential elements, but indicated that claims 1-13 would be allowable if the rejections under 35 U.S.C. §112 were overcome. To further the prosecution of this application, the rejections under 35 U.S.C. §112 are addressed below and the application as presented is believed to be in condition for allowance.

**Amendments to the Specification**

The Office Action suggested that Applicant amend the specification to include section headings. Applicant has amended the specification accordingly.

**Rejections Under 35 U.S.C. §112**

With regard to claim 1, the Office Action asserts that in lines 3-4 it is not understood how stimulating the input of the analog model causes the resistance of the input and output to change to a relatively high resistance. Applicant respectfully disagrees with this interpretation of claim 1, as lines 3-4 do not recite that stimulating the input causes the resistance of the input and output to change to a relatively high resistance. Lines 3-4 of claim 1 merely recite a step of stimulating the output of the model via an input, wherein the input and output are coupled by a relatively high resistance element. Lines 3-4 do not recite that stimulating the output causes the resistance between the input and the output to change.

The Office Action further asserts that in lines 5-6 of claim 1 it is not understood how applying a pulse to a low resistance causes the input to be connected to the output through this relatively low resistance. Lines 5-6 merely recite that when the pulse is applied to the relatively low resistance element, the input is connected to said output via the relatively low resistance element. The claim does not recite that applying the pulse to the relatively low resistance causes the input to be connected to the output via the low resistance element. Indeed, the claim does not recite the cause of the input being connected to the output, as this may be performed in any

suitable way and the invention is not limited in this respect. For example, in one embodiment of the invention shown in Figure 4 of Applicant's specification, control signal CNT causes the input to be connected to the output via the relatively low resistance element 404. However, it should be appreciated that Figure 4 is only one example of a manner in which the input may be connected to the output in any suitable way and the invention is not limited in this respect.

Thus, claim 1 meets the requirements of 35 U.S.C. §112, second paragraph. Claims 2-11 depend from claim 1 and the rejection of claims 2-11 under 35 U.S.C. §112 based on their dependency from claim 1 should also be withdrawn.

The Office Action rejected independent claim 12 under 35 U.S.C. §112 for reasons similar to those discussed above. Thus, as should be clear from the discussion above, the rejection of claim 12 under 35 U.S.C. §112, second paragraph should also be withdrawn.

Claim 13 has been rewritten in independent form and is allowable for at least the reasons discussed above. Claims 14-23 are newly added in this application. Claims 14-23 depend from claim 13 and are patentable for at least the same reasons.

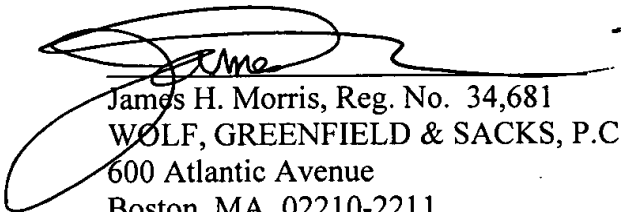
**CONCLUSION**

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to deposit account No. 23/2825.

Respectfully submitted,

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